

Claims 30, 34, 37, 38, 40-42, 44, 46, 48, 60-75, 81 and 85-92 have been amended and are presented below in amended form and Claims 93-105 are new. In accordance with 37 C.F.R. § 1.121(c)(1)(ii), amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages ii-xii).

30. (Twice Amended) A method of detecting or identifying an agent which binds a mammalian CXC Chemokine Receptor 3 (CXCR3) protein or ligand binding variant thereof, comprising combining an agent to be tested with a composition comprising an isolated and/or recombinant mammalian CXCR3 protein or ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant, and detecting or measuring the formation of a complex between said agent and said mammalian CXCR3 protein or variant,
- wherein said mammalian CXCR3 protein or ligand binding variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.
34. (Twice Amended) A method of detecting or identifying an agent which binds a mammalian CXCR3 protein or a ligand binding variant thereof comprising:
- a) combining an agent to be tested with a host cell expressing recombinant mammalian CXCR3 protein or a ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant; and
 - b) detecting or measuring the formation of a complex between said agent and said mammalian CXCR3 protein or ligand binding variant,
- wherein said mammalian CXCR3 protein or ligand binding variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.
37. (Amended) The method of Claim 34, wherein the mammalian CXCR3 protein or a ligand binding variant thereof can mediate cellular signalling and/or a cellular response, and the

formation of a complex is monitored by detecting or measuring a signalling activity or cellular response of said mammalian CXCR3 protein or variant in response thereto.

38. (Twice Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof comprising:
- a) combining an agent to be tested with a ligand of said mammalian CXCR3 protein and a composition comprising isolated and/or recombinant mammalian CXCR3 protein or ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant; and
 - b) detecting or measuring the formation of a complex between said mammalian CXCR3 protein or variant and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor,
- wherein said mammalian CXCR3 protein or ligand binding variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.
40. (Twice Amended) The method of Claim 38, wherein the composition comprising isolated and/or recombinant mammalian CXCR3 protein or ligand binding variant thereof contains a host cell expressing said recombinant mammalian CXCR3 protein or ligand binding variant thereof.
41. (Twice Amended) The method of Claim 40, wherein said mammalian CXCR3 protein or ligand binding variant thereof can mediate cellular signalling and/or a cellular response, and the formation of a complex is monitored by detecting or measuring a signalling activity or cellular response of said mammalian CXCR3 protein or variant in response thereto.
42. (Twice Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or ligand binding variant thereof comprising:

- a) combining an agent to be tested with a ligand of said mammalian CXCR3 protein and a host cell expressing a recombinant mammalian CXCR3 protein or ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or ligand binding variant; and
 - b) detecting or measuring the formation of a complex between said mammalian CXCR3 protein or variant and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor, wherein said mammalian CXCR3 protein or ligand binding variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.
44. (Twice Amended) The method of Claim 42, wherein said mammalian CXCR3 protein or ligand binding variant thereof can mediate cellular signalling and/or a cellular response, and the formation of a complex is monitored by detecting or measuring a signalling activity or cellular response of said mammalian CXCR3 protein or variant in response thereto.
46. (Twice Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with
- (a) a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof, and
 - (b) a ligand or promoter of said mammalian CXCR3 protein or variant, under conditions suitable for detecting a ligand- or promoter-induced response, and assessing the ability of the test agent to inhibit said response, whereby inhibition of a ligand- or promoter-induced response by the agent is indicative that the agent is an inhibitor,

wherein said mammalian CXCR3 protein or functional variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.

48. (Twice Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof under conditions suitable for detecting a receptor-mediated response, and detecting or measuring said response, whereby induction or stimulation of said response by the agent is indicative that the agent is a promoter,
- wherein said mammalian CXCR3 protein or functional variant selectively binds at least one chemokine selected from the group consisting of IP-10 and Mig, and shares at least about 80% amino acid sequence identity with SEQ ID NO:2.
60. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof of Claim 38, wherein said mammalian CXCR3 protein or variant shares at least about 90% amino acid sequence identity with SEQ ID NO:2.
61. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof comprising:
- a) combining an agent to be tested with a ligand of said mammalian CXCR3 protein and a composition comprising isolated and/or recombinant mammalian CXCR3 protein or a ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant; and
 - b) detecting or measuring the formation of a complex between said mammalian CXCR3 protein or variant and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor,

wherein said mammalian CXCR3 protein or ligand binding variant can selectively bind at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid sharing at least about 75% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.

62. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof of Claim 61, wherein said mammalian CXCR3 protein or variant is encoded by a nucleic acid sharing at least about 90% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.
63. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof of Claim 46, wherein said mammalian CXCR3 protein or variant shares at least about 90% amino acid sequence identity with SEQ ID NO:2.
64. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with
- (a) a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof, and
 - (b) a ligand or promoter thereof, under conditions suitable for detecting a ligand- or promoter-induced response, and assessing the ability of the test agent to inhibit said response, whereby inhibition of a ligand- or promoter-induced response by the agent is indicative that the agent is an inhibitor,
- wherein said mammalian CXCR3 protein or functional variant can selectively bind at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid sharing at least about

75% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.

65. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof of Claim 64, wherein said mammalian CXCR3 protein or variant is encoded by a nucleic acid sharing at least about 90% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.
66. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof of Claim 48, wherein said mammalian CXCR3 protein or variant shares at least about 90% amino acid sequence identity with SEQ ID NO:2.
67. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof under conditions suitable for detecting a receptor-mediated response, and detecting or measuring said response, whereby induction or stimulation of said response by the agent is indicative that the agent is a promoter, wherein said mammalian CXCR3 protein or functional variant selectively binds at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid sharing at least about 75% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.
68. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof of Claim 67, wherein said mammalian CXCR3 protein or variant is encoded by a nucleic acid sharing at least about 90% nucleotide sequence similarity with the coding region of the sequence illustrated in SEQ ID NO:1.

69. (Amended) A method of detecting or identifying an agent which binds a mammalian CXCR3 protein or ligand binding variant thereof of Claim 30, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.
70. (Amended) A method of detecting or identifying an agent which binds a mammalian CXCR3 protein or a ligand binding variant thereof of Claim 34, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.
71. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof of Claim 38, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.
72. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or ligand binding variant thereof of Claim 42, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.
73. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof of Claim 46, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or functional variant thereof.
74. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof of Claim 48, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or functional variant thereof.
75. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a human CXCR3 protein comprising:

- a) combining an agent to be tested with a ligand of said CXCR3 protein and a composition comprising recombinant human CXCR3 protein under conditions suitable for binding of ligand thereto; and
 - b) detecting or measuring the formation of a complex between said CXCR3 protein and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor, wherein said human CXCR3 protein selectively binds at least one chemokine selected from the group consisting of human IP-10 or human Mig and comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
81. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a human CXCR3 protein comprising:
- a) combining an agent to be tested with a ligand of said human CXCR3 protein and a host cell expressing a recombinant human CXCR3 protein under conditions suitable for binding of ligand to said human CXCR3 protein; and
 - b) detecting or measuring the formation of a complex between said protein and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor,
- wherein said human CXCR3 protein selectively binds at least one chemokine selected from the group consisting of human IP-10 or human Mig and comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
85. (Amended) A method of detecting or identifying an agent which binds a mammalian CXCR3 protein or ligand binding variant thereof, comprising combining an agent to be tested with a composition comprising an isolated and/or recombinant mammalian CXCR3 protein or ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant, and detecting or measuring the formation of a complex between said agent and said mammalian CXCR3 protein or variant, wherein said mammalian CXCR3 protein or ligand binding variant selectively

binds at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid that hybridizes, under high stringency wash conditions of 2X SSC, 0.1% SDS at room temperature for ten minutes followed by two washes in 1X SSC, 0.1% SDS at 65°C for thirty minutes and a final wash in 0.5X SSC, 0.1% SDS at 65°C for ten minutes, to a nucleic acid selected from the group consisting of:

- a) the complement of SEQ ID NO:1; and
- b) the complement of a portion of SEQ ID NO:1 comprising the open reading frame.

86. (Amended) A method of detecting or identifying an agent which binds a mammalian CXCR3 protein or ligand binding variant thereof of Claim 85, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.

87. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof comprising:

- a) combining an agent to be tested with a ligand of said mammalian CXCR3 protein and a composition comprising isolated and/or recombinant mammalian CXCR3 protein or a ligand binding variant thereof under conditions suitable for binding of ligand to said mammalian CXCR3 protein or variant; and
- b) detecting or measuring the formation of a complex between said mammalian CXCR3 protein or variant and said ligand, whereby inhibition of complex formation by the agent is indicative that the agent is an inhibitor,

wherein said mammalian CXCR3 protein or ligand binding variant selectively binds at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid that hybridizes, under high stringency wash conditions of 2X SSC, 0.1% SDS at room temperature for ten minutes followed by two washes in 1X SSC, 0.1% SDS at 65°C for thirty minutes and a final wash in 0.5X SSC, 0.1% SDS at 65°C for ten minutes, to a nucleic acid selected from the group consisting of:

- i) the complement of SEQ ID NO:1; and
 - ii) the complement of a portion of SEQ ID NO:1 comprising the open reading frame.
88. (Amended) A method of detecting or identifying an inhibitor of ligand binding to a mammalian CXCR3 protein or a ligand binding variant thereof of Claim 87, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or ligand binding variant thereof.
89. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with
- (a) a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof, and
 - (b) a ligand or promoter thereof, under conditions suitable for detecting a ligand- or promoter-induced response, and assessing the ability of the test agent to inhibit said response, whereby inhibition of a ligand- or promoter-induced response by the agent is indicative that the agent is an inhibitor,
- wherein said mammalian CXCR3 protein or functional variant selectively binds at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid that hybridizes, under high stringency wash conditions of 2X SSC, 0.1% SDS at room temperature for ten minutes followed by two washes in 1X SSC, 0.1% SDS at 65°C for thirty minutes and a final wash in 0.5X SSC, 0.1% SDS at 65°C for ten minutes, to a nucleic acid selected from the group consisting of:
- i) the complement of SEQ ID NO:1; and
 - ii) the complement of a portion of SEQ ID NO:1 comprising the open reading frame.
90. (Amended) A method of detecting or identifying an inhibitor of a mammalian CXCR3 protein or functional variant thereof of Claim 89, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or functional variant thereof.

91. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof comprising combining an agent to be tested with a host cell expressing a recombinant mammalian CXCR3 protein or functional variant thereof under conditions suitable for detecting a receptor-mediated response, and detecting or measuring said response, whereby induction or stimulation of said response by the agent is indicative that the agent is a promoter, wherein said mammalian CXCR3 protein or functional variant selectively binds at least one chemokine selected from the group consisting of IP-10, Mig, a homolog of IP-10, and a homolog of Mig, and is encoded by a nucleic acid that hybridizes, under high stringency wash conditions of 2X SSC, 0.1% SDS at room temperature for ten minutes followed by two washes in 1X SSC, 0.1% SDS at 65°C for thirty minutes and a final wash in 0.5X SSC, 0.1% SDS at 65°C for ten minutes, to a nucleic acid selected from the group consisting of:
- i) the complement of SEQ ID NO:1; and
 - ii) the complement of a portion of SEQ ID NO:1 comprising the open reading frame.
92. (Amended) A method of detecting or identifying a promoter of a mammalian CXCR3 protein or functional variant thereof of Claim 91, wherein the mammalian CXCR3 protein or variant thereof is a human CXCR3 or functional variant thereof.
93. (New) The method of Claim 30 wherein said mammalian CXCR3 protein or ligand binding variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
94. (New) The method of Claim 34 wherein said mammalian CXCR3 protein or ligand binding variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).

95. (New) The method of Claim 38 wherein said mammalian CXCR3 protein or ligand binding variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
96. (New) The method of Claim 42 wherein said mammalian CXCR3 protein or ligand binding variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
97. (New) The method of Claim 46 wherein said mammalian CXCR3 protein or functional variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
98. (New) The method of Claim 48 wherein said mammalian CXCR3 protein or functional variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
99. (New) The method of Claim 61 wherein said mammalian CXCR3 protein or ligand binding variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
100. (New) The method of Claim 64 wherein said mammalian CXCR3 protein or functional variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).
101. (New) The method of Claim 67 wherein said mammalian CXCR3 protein or functional variant comprises the extracellular N-terminal segment of the protein shown in Figure 2 (SEQ ID NO:2).